





From SIC to NAICS:



An Idaho Perspective





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NAICS IMPLEMENTATION: AN IDAHO PERSPECTIVE

The Bureau of Labor Statistics (BLS) has fully implemented the North American Industrial Classification System (NAICS) for Current Employment Statistics (CES). To bridge the change from the old Standard Industrial Classification (SIC) system to the new NAICS system, BLS created historical CES data in NAICS known as a "backcast" which provides data analysts with at least ten years of NAICS data. The BLS back cast can be accessed at www.bls.gov/ces.

Table 1: Idaho's Total Nonfarm CES Data in Thousands.				
Year	SIC Annual Ave.	NAICS Annual Ave.	Diff. NAICS from SIC	
1990	385	385	0	
1991	398	398	0	
1992	416	416	0	
1993	437	437	0	
1994	461	461	0	
1995	477	477	0	
1996	493	493	0	
1997	510	510	0	
1998	522	522	0	
1999	539	539	0	
2000	560	560	0	

NAICS is used by federal and state agencies for classifying business establishments. It was developed to provide a consistent framework for collection, analysis, and dissemination of industrial statistics. Business establishments are now coded according to their primary activities and production processes.

For example, a manufacturing company divided into production, corporate office, warehouse, and payroll divisions would all be coded as *Manufacturing* under SIC. However, under NAICS, production is coded *Manufacturing*, cooperate office is coded *Management of Companies and Enterprises*, warehouse is coded as *Transportation and Warehouse*, and payroll would be coded as *Professional and Technical Services*.

NAICS is organized hierarchically with 20 major sectors whereas the (SIC) system has only ten divisions (See Table on page 8). The NAICS sectors also emphasize the emerging *Service –Providing* industries.

The SIC divisions and the NAICS sectors are divided into two categories: *Goods-Producing* industries and *Service-Providing* industries. The *Goods-Producing* industry for both SIC and NAICS includes *Agriculture, Forestry, Fishing and Hunting, Mining, Construction,* and *Manufacturing*. The remainder of the sectors and divisions make up the *Service-Providing* industry. Considering there are 10 additional industry sectors in NAICS, all of which are *Service Providing* industries, and that Idaho's Total Nonfarm Employment levels remained the same, (see Table 1), we can conclude that NAICS is inherently laced with employment shifts.

This report focuses on some of the shifts Idaho's economic development and academic researchers face when analyzing non-seasonally adjusted BLS backcast data for Idaho's new NAICS industries. It also focuses on a few of the challenges when comparing some of Idaho's CES NAICS data to Idaho's SIC data for major sectors.

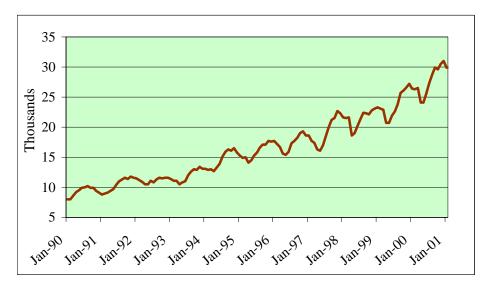
Why are these employment shifts important to Idaho?

Idaho's economic development and academic researchers use industrial and business statistics to measure the local economy, and to conduct market analysis and impact studies. One of the challenges they face is comparing BLS data over time. Unless Idaho's researchers and economists understand the

Graph 1: Idaho's Employment in Management of Companies and Enterprises



Graph 2: Idaho's Employment in Administrative Support and Waste Management and Remediation Services



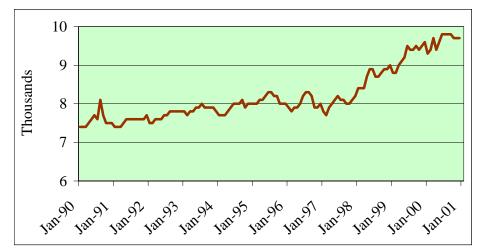
new NAICS classification system and it's inherent employment shifts, they cannot perform the research and analysis requested by their employers and clients. While most historical SIC data is available, comparing historical SIC data to current NAICS data will be very difficult due to new NAICS industries, the shifting of existing industries, and the shifting of industries Goods-Producing to Service-Providing.

New NAICS industries for Idaho:

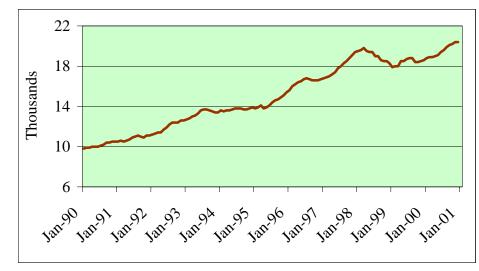
NAICS has added many industries and sectors that were unknown in the SIC system. Graphs 1 and 2 represent two new Service-Providing industries in Idaho, Management of Companies and Enterprise

and Administrative Support and Waste Management and Remediation Services. These were created by the reclassification of corporate offices and SIC industries such as Business Services. As in our manufacturing company example above, corporate offices were assigned the SIC code that reflects

Graph 3: Idaho's Employment in Information



Graph 4: Idaho's Employment in Computer and Electronic Product Manufacturing



their company, not their function. Under NAICS, *Business Services* is mostly spread out among three new industries, the two mentioned above and the new *Professional, Scientific, and Technical Services* industry.

Other NAICS industries that deserve mentioning for Idaho are Information and and Electronic Computer Manufacturing. Product Information, which includes Printing and Publishing, formerly under the SIC Manufacturing division, is now part of the NAICS Service-Providing industries. Computer and Electronic Product Manufacturing represents Idaho's hi-tech industry. These new industries are represented in Graphs 3 and 4.

Understanding the employment shifts in Idaho.

A good place to start for Idaho's economic development and academic researchers to understanding the transition from SIC to NAICS is to understand the employment shifts between *Goods-Producing* industries and *Service-Providing* industries. The difference between SIC and NAICS for *Goods-Producing* industries is offset by the difference between SIC and NAICS for *Service-Providing* industries as shown on Table 2 on page 4.

Table 2: Idaho's Employment in Thousands							
Goods Producing			Service Providing			Net Diff.	
Year	SIC Annual Ave.	NAICS Annual Ave	Diff. NAICS from SIC	SIC Annual Ave.	NAICS Annual Ave	Diff. NAICS from SIC	Gds. Prod. from Srvc. Prov.
1990	86	78	-7	299	306	7	0
1991	87	81	-6	312	317	6	0
1992	91	85	-5	326	331	5	0
1993	96	90	-6	340	346	6	0
1994	103	96	-7	358	365	7	0
1995	103	98	-5	374	379	5	0
1996	107	103	-4	386	390	4	0
1997	110	106	-3	400	404	3	0
1998	111	107	-4	411	415	4	0
1999	114	109	-5	425	430	5	0
2000	116	111	-5	444	449	5	0

Chart 1: Employment Average Between 1990 and 2000.

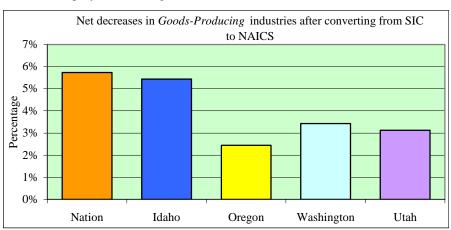
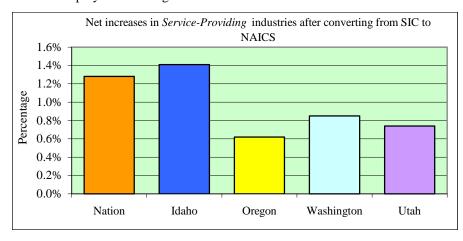


Chart 2: Employment Average between 1990 and 2000.



These offsets are not unique to Idaho. In all states, as well as the nation, the differences between SIC and NAICS for *Goods-Producing* offset the differences between SIC and NAICS for *Service-Providing*, however, the magnitudes of the differences differ.

The net decreases between the NAICS *Goods-Producing* industries and the SIC *Goods-Producing* industries are shown as a percent of SIC *Goods-Producing* industries on Chart 1. On average, the conversion from SIC to NAICS decreased Idaho's *Goods-Producing* industries by more than 5 percent, which is higher than some of Idaho's neighboring states.

As already determined, after converting from SIC to NAICS, the decreases in *Goods-Producing* industries must be offset by an increases in *Service-Providing* industries. The increase in the NAICS *Service-Providing* industries is shown as a percent of the SIC *Service-Providing* industries on Chart 2 on page 4. Here we can see that on average, the conversion from SIC to NAICS increased Idaho's *Service Providing* industries by more than 1 percent, also higher than some of Idaho's neighboring states.

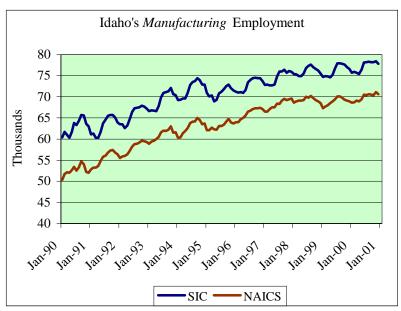
Even though, the number of jobs shifting from *Goods Producing* industries to *Service Providing* industries has a net difference of zero after converting from SIC to NAICS, the percentage changes in each sector are different. This is because Total Nonfarm Employment is not equally divided between the *Goods Producing* industries and the *Service Providing* industries. The *Service-Providing* industry has more employment than the *Goods-Producing* industries.

Comparing Idaho's Manufacturing employment shifts from SIC to NAICS.

In the *Manufacturing* industries, the conversion from SIC to NAICS and the corresponding backcast resulted in a decrease of 7,000 to 10,000 people in any given year. See Table 3 and its corresponding graph for details. The reclassification of some SIC businesses previously in *Goods-Producing* industries, such as *Printing and Publishing* mentioned earlier, is partly responsible for the shifting of these people to NAICS *Service-Providing* industries.

Table 3 with Graph: Idaho's Manufacturing Employment in Thousands.

Year	SIC	NAICS	Diff.
	Annual	Annual	NAICS
	Ave.	Ave.	from SIC
1990	63	53	-10
1991	63	55	-8
1992	66	58	-8
1993	69	61	-8
1994	72	63	-9
1995	71	63	-8
1996	73	66	-7
1997	75	68	-6
1998	76	69	-7
1999	76	69	-7
2000	77	70	-7

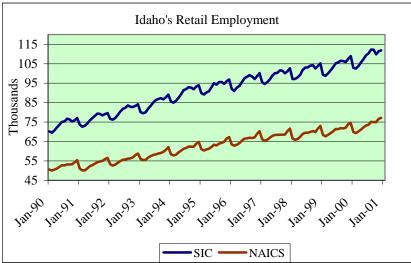


Additional problems for Idaho.

Even though the data shows a net change in employment of zero from *Goods-Producing* industries to *Service-Providing* industries, the reclassification of businesses and industries within the *Service-Providing* industries can create difficulties when performing historical analysis on some affected industries. The conversion from SIC to NAICS caused a decrease in Idaho's *Retail Trade* sector of 21,000 to 35,000 any given year of the backcast from 1990 to 2000. See Table 4 and its corresponding graph for details. This employment shifted out of *Retail Trade* and into other *Service-Providing* NAICS industries such as *Management of Companies and Enterprises*.

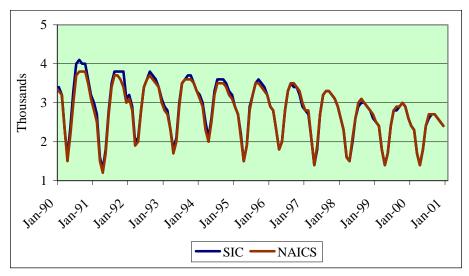
Table 4 with Graph: Retail Employment in Thousands

Year	SIC	NAICS	Diff.
	Annual	Annual	NAICS
	Ave.	Ave.	from SIC
1990	74	52	-22
1991	77	53	-24
1992	81	55	-25
1993	85	58	-26
1994	90	61	-29
1995	93	63	-30
1996	96	66	-30
1997	99	68	-31
1998	102	69	-33
1999	104	71	-33
2000	108	73	-35



Which shifts are easy for Idaho's researchers and economic development professionals to capture?

Graph 5: Idaho's *Logging* Employment

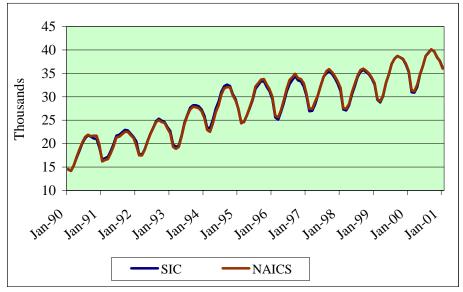


Fortunately there are couple of NAICS industries that are of particular interest to Idahoans that almost match up one-for-one with their corresponding SIC counterparts. These Logging, which is no longer part of Manufacturing; it is now part of Natural Resources and Mining, and Construction. The changes in employment for these two industries were negligible during the conversion from SIC to NAICS, as shown in Graphs 5 on page 6, and Graph 6.

Conclusion.

Now that the Bureau of Labor Statistics has fully converted CES data from SIC to NAICS, Idaho's researchers and economic development professionals can finally analyze the inherent employment shifts associated with the conversion process.

Graph 6; Idaho's Construction Employment



Even though Idaho's net change between SIC and NAICS is zero, analyzing the internal employment shifts are very difficult due to the many NAICS reclassified businesses and industries. This is compounded when having to compare twenty sectors under **NAICS** to only ten divisions under SIC. However, there is some

solace in the fact that the BLS has provided historical NAICS back cast data to aid us in understanding these employment shifts. Fortunately there are a few industries, in Idaho at least, that are unaffected by the conversion from SIC to NAICS, but these are far and few between.

